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# A New “PPE” For A Thriving Community: Public Health, Primary Care, Health Equity

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The COVID-19 pandemic has introduced many of us to a [new vocabulary](#): coronavirus, herd immunity, surge capacity, [contact tracing](#), and personal protective equipment (PPE), to name a few. [PPE](#) includes all the equipment we wear to [minimize exposure to and spread](#) of this novel coronavirus, SARS CoV-2, [including](#) disposable gloves, N-95 masks,

face shields, gowns, and cloth masks. PPE is an essential component of COVID-19 response team safety, hospital, and clinic staff requirements, and even community infection prevention recommendations.

Public health, primary care, and health equity have emerged as crucial components of the pandemic response and recovery. The massive scale and widespread impact of COVID-19 necessitates a robust collaboration between governmental public health agencies, health care organizations, businesses, and social services with a focus on addressing the disparate impact of the pandemic on vulnerable communities. A strong local public health infrastructure is needed to monitor local infection rates and population health trends and implement contact tracing and other efforts to reduce transmission. Primary care is critical for implementing testing and medical care, and for addressing ongoing health needs and additional secondary surges in poor physical and mental health resulting from the economic disruption and difficulty in accessing regular health care during the surge or lockdown. The strategy for an optimal pandemic response and recovery requires a concerted and coordinated multisector effort, informed by a health equity lens, integrated into policies, practice, and evidence.

Given that risks of COVID-19 exposure, infection, severity of illness, and community impact are not evenly distributed across individuals and communities, we expect increased progression of chronic diseases and increased prevalence of mental health conditions that disproportionately impact communities of color, and that exacerbate preexisting disparities in health status. A wide array of historical and contemporary conditions shape the health equity dimensions of COVID-19, including housing, transportation, education, employment, air quality, and the food environment, along with exposure to racism, discrimination, and the criminal justice system.

Public health, primary care, and health equity each have unique and synergistic impact on a community's response to this novel virus. Following years of decreased funding, public health is struggling to build the infrastructure and workforce necessary for COVID-19 contact tracing; primary care practices risk closing due to inadequate payment models; and our country continues to face stark disparities in COVID-19 health outcomes by race, socioeconomic status, gender, and geography. It is clear that each of these issues will also impact our eventual recovery from this pandemic. Historically, primary care and public health have only tangentially worked together. Primary care has focused on the individual and family, public health at the population level and on the community. However, there is growing appreciation for the need for primary care and public health to collaborate if we hope to improve the health of our nation. Wellness and illness are more than just the etiologic characteristics of an infection, injury, or pathology. Wellness and

illness always exist in the context of the patient’s environment, social factors, and community.

## A New “PPE”

We propose a new “PPE” that will provide communities with the knowledge, assets, tools, and plans to respond to and recover—and essentially, protect themselves—from the COVID-19 pandemic. The [combined efforts](#) of [Public Health](#), [Primary Care](#), and [Health Equity](#) (aptly, PPE) can provide a path toward [COVID-19 recovery](#). It may also set the stage for a new health care system that builds [local communities of solution](#) by linking the efforts of public health and primary care with those community organizations inserting equity into the social determinants of health.

## Health Is A Community Affair—A Framework For The New PPE

[Health is a Community Affair](#), a 1966 report by the National Commission on Community Health Services, set out a model for community health that demands [primary care, public health, and community organizations](#) work together. Similarly, the [Practical Playbook](#) offers a robust guidebook to pull primary care and public health into a shared effort to build communities of solution. There are [individual examples](#) of local public health agencies working with primary care partners to address the [local community health](#). But overall, primary care and public health have gone about their work alone. The [social determinants of health are infused](#) into both primary care and public health as statistical variables and targets for intervention. Neither has the resources nor policy levers to adequately address the disintegrated social determinants of health inequities suffered by so many of our communities and individuals.

## Measuring Community Capacity—The PPE Index

The authors of this blog post have developed the community public health, primary care, and health equity index (or Community PPE Index), which provides an opportunity for consumers and policy makers to see the shared impact that public health and primary care might have on a local community’s ability to weather the pandemic. It will require both public health and primary care functioning at their best to respond to the pandemic and recover as quickly as possible. By seeing and understanding the shared impact of public health and primary care, consumers will be able to make better decisions about their own individual care, the needs of their neighbors, and the local community efforts for addressing this unprecedented pandemic. For policy makers, a measure of the combined impact of public health, primary care, and the social determinants of health will provide the evidence needed for program implementation and resource allocation.

The Community PPE Index will be a robust estimate of a local community’s capacity to respond to and recover from the impacts of this pandemic. While we recognize that these are not the only factors that impact the health of a community, research has found that each element of the Index has a large impact on the health of the community. We also recognize that for a given community, the relative impact of each of these may vary. We built this index to standardize this impact across local county jurisdictions for ease of interpretation, individual decision making, and policy efforts. We chose to give each component equal weight to the index so that it is clear to the consumer and policy maker that each component plays a significant role in the health of the community.

Primary care capacity and access have been shown to have a positive impact on overall health outcomes. [Starfield described the impact](#) of an expanded primary care workforce on a host of health outcomes and costs. The [primary care goal](#) is one primary care provider per 1,500 population. [Public health](#) has a robust literature on the improved health outcomes of individual programs as well as investment in the general public health infrastructure. The [National Health Security Preparedness Index \(NHSPI\)](#), was created to guide public health resources to improve the opportunity to respond to widespread disaster, national security issues, and pandemics. Composed of more than 50 components of public health resource capacity, the index creates a 10-point scale that provides easy interpretation of a local county health department capacity for emergency response and recovery. The [Social Determinants of Health \(SDOH\)](#) are known to have a profound impact on health outcomes, engaging the broader community in multisector approaches to addressing health equity and quality of life. The [Social Deprivation Index \(SDI\)](#) is a county measure of social determinants of health that predicts health outcomes better than poverty alone.

The Community PPE Index is more than a county ranking system. It provides a comparison of each county to an aspirational goal. Each component—public health, primary care, and health equity—is based on a 10-point scale with 10 being the highest possible score, for a total score from 3 to 30. The public health goal is a score of 10 on the NHSPI Index. The [primary care goal](#) of 10 represents 1 primary care provider per 1,500 population. For health equity, a score of 10 on the [social deprivation index](#) is the goal. Combining these three factors, the Community PPE Index will provide consumers and policy makers with information about local risks, health inequities, and potential clinical, public health, and policy levers to improve community health and address health disparities.

## Applications Of The Community PPE Index: Consumer Appeal, Policy, And International



The Community PPE Index will provide the user a local score based on a sum of the components associated with public health, primary care, and health equity. This overall score will provide a view of the capacity of the local community to address the impact of COVID-19 during the acute phase and in the recovery phase of the pandemic and can be generalized to other health challenges as well. Each component of the score will be clearly communicated. Consumers will come to understand the interconnected relationship between the local primary care and public health, and how the social determinants of health equity impact individual and community health outcomes. This is a unique opportunity to highlight for consumers the relationship among primary care, public health, social determinants of health, and the actual health of their communities and neighborhoods.

For policy makers, the Community PPE Index will provide the evidence necessary to inform policy-making decisions related to program implementation, resource allocation, and long-term investments in the health of local communities, counties, and states. For a county with a poor primary care index component, policies related to recruitment and retention of primary care clinicians may be important. For counties with a low public health index component, investment in public health infrastructure will be crucial. For counties with disintegrated social determinants of health, long-term multidimensional solutions may be sought to improve employment, address poverty, food insecurity, housing, and transportation.

As we consider how to implement local communities of solution worldwide, the Community PPE Index may serve as a useful framework for other countries to consider. The synergistic contribution of primary care, public health, and [attention to health equity](#) is universal; however, each of these components are rooted in [local context](#) and will require local engagement, local culture, and local data.

## The Community PPE

The current opportunity to reveal the shared impact of primary care, public health, and the social determinants of health is unprecedented. The COVID-19 pandemic has laid bare the inadequacies of our nation's [primary care workforce](#), insufficient funding for [public health](#), and the profound impact that health inequalities and the [social determinants of health](#) have on the our communities facing this pandemic. Really, the index could be termed the COVID-19 Response and Recovery Index. While the name “Community PPE” conjures masks and gowns, we believe it also reminds us that the local community can be part of the solution; that COVID-19 response and recovery requires more than physical barriers. The Community PPE Index provides an easily

accessible, reliable, and reproducible guide to COVID-19 response and recovery. It may also provide a long-term tool to help build and sustain healthier communities.



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**Jen Sweeney** • 4 months ago

Great to see this thinking about the potential of the combined power of Primary Care, Public Health, and Health Equity efforts to advance health in communities. I'm involved in a similar effort in OR.

Jen Sweeney, Co-Founder, X4 Health [www.x4health.com](http://www.x4health.com)

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